

PATENT APPLICATION

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IN THE U.S. PATENT AND TRADEMARK OFFICE

November 7, 2001

Applicant(s) : Okimitsu YASUDA et al.

For : SULFURIC ACID RYCYCLE APPARATUS

Atty. Docket No.: OPS Case 555

Assistant Commissioner for Patents  
Washington, DC 20231

PRELIMINARY AMENDMENT CANCELLING CLAIMS

Sir:

Prior to calculation of the filing fee in the above-identified application, kindly enter the following:

IN THE CLAIMS

Kindly amend Claims 3 and 5-7 as follows:

3. (Amended) The sulfuric acid recycle apparatus according to Claim 1, wherein the reaction bath includes therein a plurality of partition plates for changing an advancing direction of the wafer cleaning waste fluid, and an inclination plate positioned at a portion closer to the gas discharge port than the partition plates for allowing the concentrated sulfuric acid to flow along the surface thereof.

5. (Amended) The sulfuric acid recycle apparatus according to Claim 1, wherein the reaction bath has a waterdrop storage bath for preventing waterdrop attached to a ceiling surface of the reaction bath from being mixed with the concentrated sulfuric acid.

6. (Amended) The sulfuric acid recycle apparatus according to Claim 1, wherein fresh sulfuric acid is supplied to the concentrated sulfuric acid.

7. (Amended) The sulfuric acid recycle apparatus according to Claim 2, wherein a heating temperature in the reaction bath ranges from 150°C to 350°C.

Pursuant to 37 CFR §1.121, a marked-up version of amended Claims 3 and 5-7 is attached hereto showing the changes made by the current amendment.

REMARKS

This amendment amends Claims 3 and 5-7 to eliminate multiple dependencies so as to reduce the filing fee. Please enter this amendment before calculating the filing fee.

Respectfully submitted,

  
Dale H. Thiel

DHT/jp

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Encl: Marked-up version of Claims 3 and 5-7

111.9803

Claims 3 and 5-7 have been amended as follows:

3. (Amended) The sulfuric acid recycle apparatus according to Claim 1 ~~or 2~~, wherein the reaction bath includes therein a plurality of partition plates for changing an advancing direction of the wafer cleaning waste fluid, and an inclination plate positioned at a portion closer to the gas discharge port than the partition plates for allowing the concentrated sulfuric acid to flow along the surface thereof.

5. (Amended) The sulfuric acid recycle apparatus according to ~~any of Claims 1 to 4~~ Claim 1, wherein the reaction bath has a waterdrop storage bath for preventing waterdrop attached to a ceiling surface of the reaction bath from being mixed with the concentrated sulfuric acid.

6. (Amended) The sulfuric acid recycle apparatus according to ~~any of Claims 1 to 5~~ Claim 1, wherein fresh sulfuric acid is supplied to the concentrated sulfuric acid.

7. (Amended) The sulfuric acid recycle apparatus according to ~~any of Claims 2 to 6~~ Claim 2, wherein a heating temperature in the reaction bath ranges from 150°C to 350°C.